Project Design Phase Technology Stack (Architecture & Stack)

Date	15 April 2025
Team ID	SWTID1743695015
Project Name	Shopez: E-Commerce Application
Maximum Marks	4 Marks

Technical Architecture:

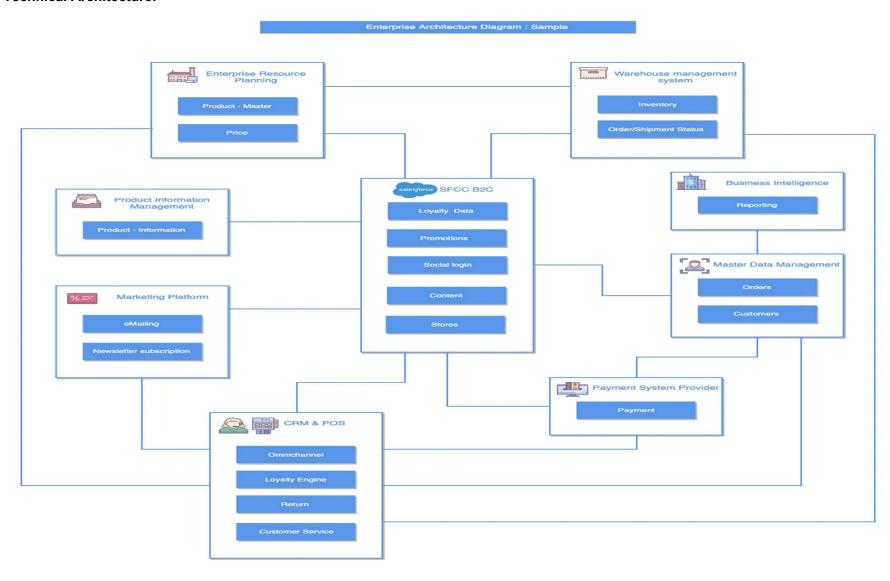


Table-1: Components & Technologies:

SI.No	Component	Description	Technology
1.	Enterprise Resource Planning	Manages core business processes like product	SAP, Oracle ERP, Microsoft Dynamics
		master data and pricing.	
2.	Warehouse Management System	Handles inventory tracking and shipment/order	Manhattan WMS, SAP EWM, Oracle
		status updates.	WMS
3.	Product Information Management	Centralizes and manages product data for accuracy across platforms.	Akeneo, Salsify, Informatica PIM
4.	Marketing Platform	Executes marketing campaigns including emails and newsletters.	Mailchimp, Salesforce Marketing
			Cloud, HubSpot
5.	CRM & POS	Customer Relationship Management and	Salesforce CRM, Oracle POS, Lightspeed, Square POS
		Point of Sale for loyalty, returns, etc.	
6.	SFCC B2C (Salesforce Commerce Cloud)	Central eCommerce platform handling promotions, content, loyalty, etc.	Salesforce B2C Commerce (formerly Demandware)
7.	Master Data Management	Maintains consistent data across systems—orders and customer records.	Informatica MDM, IBM InfoSphere, Talend
8.	Payment System Provider	Manages and processes customer payments securely.	Stripe, PayPal, Adyen, Razorpay
9.	Business Intelligence	Analyzes business data and provides reporting and dashboards.	Power BI, Tableau, Looker, Qlik

Table-2: Application Characteristics:

SI.No	Characteristics	Description	Technology	
1.	Centralized Business Logic	Core backend system managing product master data and pricing.	SAP, Oracle ERP, Microsoft Dynamics	
2.	Real-time Inventory & Shipment Tracking	Tracks stock levels and order/shipment status for fulfillment.	SAP EWM, Manhattan Associates, Oracle WMS	
3.	Centralized Product Data	Maintains consistent and updated product details across platforms.	Akeneo, Salsify, Informatica PIM	
4.	Automated Customer Outreach	Runs targeted campaigns via email and newsletters.	Mailchimp, Salesforce Marketing Cloud,	HubSp
5.	Secure Payment Processing	Facilitates encrypted and compliant online payments.	Stripe, PayPal, Razorpay, Adyen	

Spot